

BROKEN SYMMETRY FOR OPTIMIZATION OF RESOURCE
FABRIC IN A SEA-OF-PLATFORM ARCHITECTURE

ABSTRACT

The present invention is directed to a method and system for optimally mapping a general set of resources to a specific integrated circuit design. In an exemplary aspect of the present invention, a method for optimally mapping a general set of resources to a specific integrated circuit design may include the following steps. Sets of transistors are first abstracted into abstracted resources. The abstracted resources may include a transformative resource, a coordinating resource, and a state management resource, and the like. Then, a sea-of-platforms is utilized for unifying a flexible and malleable collection of the abstracted resources in such a way as to optimize the abstracted resources for a specific integrated circuit design. Broken symmetry may be used to optimize the abstracted resources for the specific integrated circuit design. The broken symmetry may be in at least one of a physical 3-dimensional space, a temporal space and a code space.